



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/846,456	05/02/2001	Marie-Francoise Rosier-Montus	3806.0505	1457

5487 7590 04/05/2006
ROSS J. OEHLER
AVENTIS PHARMACEUTICALS INC.
1041 ROUTE 202-206
MAIL CODE: D303A
BRIDGEWATER, NJ 08807

EXAMINER

SULLIVAN, DANIEL M

ART UNIT PAPER NUMBER

1636

DATE MAILED: 04/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/846,456

Applicant(s)

ROSIER-MONTUS ET AL.

Examiner

Daniel M. Sullivan

Art Unit

1636

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5-14,23,33-38,57 and 58 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,35,36 and 58 is/are allowed.
- 6) ☒ Claim(s) 2,3,5-14,23,33,34,37 and 38 is/are rejected.
- 7) ☒ Claim(s) 57 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☒ Other: Sequence alignments.

DETAILED ACTION

This Office Action is a reply to the Paper filed 17 January 2006 in response to the Final Office Action mailed 17 May 2005. Claims 1-3 and 5-38 were considered in the 17 May Office Action. Claims 15-22 and 24-32 were canceled, claims 1-3, 5, 6 and 23 were amended, and claims 57-58 were added in the 17 January Paper.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 17 January 2006 has been entered.

Presently, claims 1-3, 5-14, 23, 33-38, 57 and 58 are pending and under consideration.

Response to Amendment

Rejection of claims 15-22 and 24-32 is rendered moot by the cancellation thereof.

Claim Rejections - 35 USC § 112

Rejection of claim 23 under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement for the reasons set forth in the 17 May Office Action is withdrawn in view of the fact that the claim does not require that the nucleic acid exhibit transcriptional regulatory activity.

Rejection of claims 1-3, 5-14, 23, 33-38, 57 and 58 under 35 U.S.C. 112, second paragraph, as being indefinite is withdrawn in view of the amendments to the claims.

New Grounds

Claim Objections

Claim 57 is objected to because of the following informalities: The claim is objected to because the phrase “a polynucleotide which has having at least...” is grammatically incorrect. Appropriate correction is required.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 37 and 38 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The discussion of “Recombinant host cells” in the specification commencing at page 4 does not provide a limiting definition of a host cell within the scope of the claims. In addition, the specification commencing on page 59 contemplates *in vivo* gene transfer of the nucleic acids of the invention and contemplates at page 74, line 10, *in vivo* gene transfer into human cells. Given that there is no limiting definition of a host cell and the application contemplates the production of recombinant host cells in humans *in vivo*, the host cell of the claims can reasonably be construed as encompassing a cell present or intended to be present in a human being, said cell becoming integrated into the human being and therefore being an

Art Unit: 1636

inseparable part of the human itself. The scope of the claim, therefore, encompasses a human being, which is non-statutory subject matter. As such, the recitation of the limitation “non-human” or “isolated host cell” would be remedial. See 1077 O.G. 24, April 21, 1987.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 7-12, 33 and 34 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 7-12 are indefinite in reciting, “said isolated nucleic acid is a polynucleotide comprising a sequence ranging from the nucleotide at position –1 to the nucleotide at position –200 [*etc.*], with respect to the first nucleotide transcribed, which is located at position 2894 of the nucleotide sequence of SEQ ID NO: 1.” First, there is no antecedent basis for “the nucleotide at position –1” or “the nucleotide at position –200 [*etc.*]” or a “first nucleotide transcribed” in the claims from which claims 7-12 depend. Although claim 6 recites, “said nucleic acid modifies the transcription of a polynucleotide placed under its control” the claim does not require that the nucleic acid actually comprise a polynucleotide placed under its control. Rather, claim 6 is reasonably construed as reciting a functional property of the claimed nucleic acid, but does not require that the claimed nucleic acid actually comprise an expression cassette. Therefore, there is no –1 position or “first nucleotide transcribed” inherent to the claims from which claims 7-12 depend. Furthermore, even if the prior claims were directed to an expression cassette comprising

Art Unit: 1636

“a sequence ranging from...”, there is neither explicit nor implicit antecedent for a position –200, –600, –2894, –995, *etc.* in the claims.

In addition, it is unclear to what the “sequence ranging from the nucleotide at position [A] to the nucleotide at position [B]” is referring. Although the claim recites that the numbering is with respect to the first nucleotide transcribed, which is identified as being located at position 2894 of the nucleotide sequence of SEQ ID NO: 1, the claims do not appear to be limited to comprising the sequence of SEQ ID NO: 1. Claims 3 and 5, from which claim 6 and subsequent claims depend, are clearly not limited to comprising SEQ ID NO: 1. In view of this, it is unclear what sequence is comprised within the range recited in the claims, other than the sequence of claims 3 and 5, which can be as short as 20 or 35 nucleotides, respectively. Furthermore, as the claims are not limited to comprising SEQ ID NO: 1, it is unclear how the identification of position 2894 of SEQ ID NO: 1 as “the first nucleotide transcribed” limits the claim. In the absence of a limitation that the claim comprise SEQ ID NO: 1 or some significant portion of SEQ ID NO: 1 that includes the transcriptional start site, it is unclear how position 2894 of SEQ ID NO: 1 is related to the nucleic acid being claimed. This is because the transcriptional start site in SEQ ID NO: 1 is defined by the regulatory elements lying upstream of SEQ ID NO: 1, which are not necessarily comprised by the claimed nucleic acid unless it is Applicant’s intention that the identification of the first nucleotide transcribed as located at position 2894 of the nucleotide sequence SEQ ID NO: 1 limit the claimed nucleic acid to comprising the regulatory elements of SEQ ID NO: 1 configured so as to provide a first nucleotide transcribed at a position corresponding to position 2894 of SEQ ID NO: 1.

Art Unit: 1636

Given that the terms in the claims lack antecedent basis, the claims do not clearly indicate what sequence is comprised within the range recited in the claim and it is unclear how the recitation of the first nucleotide transcribed to being located at position 2894 of SEQ ID NO: 1 limits the claims, the metes and bounds of the claimed subject matter as a whole are unclear.

Claim 33 is indefinite in reciting that the polynucleotide encodes one compound chosen from “polypeptides of interest and nucleic acids of interest”. It is unclear whether the use of the plural requires that the nucleic acid encode more than one polypeptide or nucleic acid. If this were the case, then the requirement for multiple polypeptides or nucleic acids would seem inconsistent with the phrase “at least one”. If it is Applicant’s intention that the claims cover the nucleic acid encoding at least one polypeptide or at least one nucleic acid, it would be remedial to amend the claims to recite the singular “polypeptide” and “nucleic acid”, which are construed as encompassing one or more.

Claim 34 is indefinite insofar as it depends from claim 33.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 2, 3, 5-14 and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Langmann et al. (Biochemical and biophysical Research Communication, 2/9/1999, Vol. 257:29-33; see the entire document).

As stated in the 19 November 2002 Office Action, Langmann et al teach the purification and characterization of a full-length cDNA (~6.8 kb) for the human ABC1 transporter that was given the accession number AJ012376 (e.g. Abstract; page 30, 1st paragraph Results and Discussion). The attached NCBI readout for AJ012376 indicates that the full-length cDNA taught by Langmann et al comprises the first 120 nucleotides 5' of the coding sequence. This 5' coding sequence would necessarily "modify" the transcription of the coding sequence under its control.

This rejection was originally made in the 19 November Office Action and withdrawn when the claims were limited to comprising a polynucleotide having at least 300 nucleotides of SEQ ID NO: 1 (see Applicant's remarks filed 21 April 2003, first full paragraph on page 11). In the 17 January Paper, Applicant has amended the claims such that they are no longer limited to comprising 500 or more consecutive nucleotides of SEQ ID NO: 1. Therefore, the claimed subject matter again embraces the nucleic acid of Langmann *et al.* and the claims are properly rejected under 35 USC §102(b) as anticipated by Langmann *et al.*

Claim 2 is rejected under 35 U.S.C. 102(b) as being anticipated by Auffray et al (C. R. Acad. Sci. III, Sci. Vie 318, No. 2, pages 263-272; see the search reports attached to the 19 November Office Action action).

As stated in the 19 November Office Action, as indicated by the attached search reports, Auffray et al teach the sequence the sequence of a cDNA clone obtained from the infant brain. The sequence taught by Auffray et al comprises greater than 20 contiguous nucleotides of SEQ ID NO: 2.

This rejection was originally made in the 19 November Office Action and maintained in the Office Action mailed 12 November 2003 on the grounds that the phrase "...comprising a polynucleotide of the sequence SEQ ID NO: 2..." can be read broadly to specify any sequence found within SEQ ID NO: 2 (see page 3 of the 12 November Office Action). The rejection was subsequently withdrawn when the claims were amended to recite, "...a polynucleotide of the entire nucleotide sequence..." However, the 17 January Paper amends the claims such that this phrase is no longer recited in claim 2 and the claim again embraces the nucleic acid of Auffray *et al*. Therefore, the claims are properly rejected under 35 USC §102(b) as anticipated by Auffray *et al*.

Claims 2, 3, 6-14 and 23 are rejected under 35 U.S.C. 102(e) as being anticipated by Tall U.S. Patent No. 6,773,893 B1.

Claim 1 of Tall is directed to an isolated ABC1 promoter that directs transcription of a heterologous coding sequence positioned downstream therefrom, wherein the promoter comprises nucleotides having the nucleotide sequence beginning at bp 624 and ending at bp 1197 of SEQ ID NO: 1 or beginning at bp 1005 and ending at bp 1059 of SEQ ID NO: 1. As evidenced by the sequence alignments mailed herewith (us-09-846-456a-1.rni, RESULT 3 and us-09-846-456a-3.rni, RESULT 3), the claimed nucleic acids of Tall anticipate the nucleic acid

Art Unit: 1636

comprising a nucleotide sequence of SEQ ID NO: 2 and comprising at least 20 consecutive nucleotides of SEQ ID NO: 3 according to claims 2 and 3. Furthermore, claim 1 of Tall recites that the nucleic acid directs transcription according to the instant claims 6-12 and comprises various regulatory elements identified in the instant application as having positive or negative regulatory activity according to claims 13 and 14 (see especially Figure 2 and Table 1 of the instant application, which identifies several regulatory elements, and the sequence alignment us-09-846-456a-3.rni, page 4, which shows where the identified elements appear in the sequence of Tall). Finally, given the close structural similarity of the nucleic acid claimed by Tall to the instant SEQ ID NO: 1, one would expect, absent evidence to the contrary, that the nucleic acid of Tall would hybridize to a nucleic acid having 500 or more consecutive nucleotides of the sequence complementary to SEQ ID NO: 1.

The nucleic acid of Tall is the same as the nucleic acid of the instant claims. Therefore, the claims are properly rejected under 35 USC §102(e) as anticipated by Tall.

Claims 2, 5, 6-13 and 23 are rejected under 35 U.S.C. 102(e) as being anticipated by Hayden *et al.* U.S. Patent No. 6,617,122 B1.

Hayden *et al.* teaches a nucleic acid comprising the ABC1 promoter, which nucleic acid comprises SEQ ID NO: 14 (see especially Figure 12 and the brief description thereof at column 12, lines 19-21). As evidenced by the sequence alignments mailed herewith (us-09-846-456a-2.rni, RESULT 1 and us-09-846-456a-5.rni, RESULT 9), the nucleic acid of Hayden *et al.* anticipates the nucleic acid comprising a nucleotide sequence of SEQ ID NO: 2 and comprising at least 35 consecutive nucleotides of SEQ ID NO: 5 according to claims 2 and 5. Furthermore,

Art Unit: 1636

Hayden *et al.* teaches that the nucleic acid is a promoter according to the instant claims 6-13.

Finally, given the close structural similarity of the nucleic acid of Hayden *et al.* to nucleic acids comprised within the instant SEQ ID NO: 1, one would expect, absent evidence to the contrary, that the nucleic acid of Hayden *et al.* would hybridize to a nucleic acid having 500 or more consecutive nucleotides of the sequence complementary to SEQ ID NO: 1 according to the instant claim 23.

The nucleic acids of Hayden *et al.* are the same as the nucleic acid of the instant claims. Therefore, the claims are properly rejected under 35 USC §102(e) as anticipated by Hayden *et al.*

Allowable Subject Matter

Claims 1, 35, 36 and 58 are allowed.

Claim 57 is objected to.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel M Sullivan whose telephone number is 571-272-0779. The examiner can normally be reached on Monday through Friday 6:30-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Remy Yucel, Ph.D. can be reached on 571-272-0781. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Patent applicants with problems or questions regarding electronic images that can be viewed in the Patent Application Information Retrieval system (PAIR) (<http://pair-direct.uspto.gov>) can now contact the USPTO's Patent Electronic Business Center (Patent EBC) for assistance. Representatives are available to answer your questions daily from 6 am to

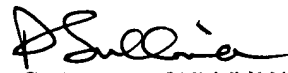
Art Unit: 1636

midnight (EST). The toll free number is (866) 217-9197. When calling please have your application serial or patent number, the type of document you are having an image problem with, the number of pages and the specific nature of the problem. The Patent Electronic Business Center will notify applicants of the resolution of the problem within 5-7 business days.

Applicants can also check PAIR to confirm that the problem has been corrected. The USPTO's Patent Electronic Business Center is a complete service center supporting all patent business on the Internet. The USPTO's PAIR system provides Internet-based access to patent application status and history information. It also enables applicants to view the scanned images of their own application file folder(s) as well as general patent information available to the public.

For all other customer support, please call the USPTO Call Center (UCC) at 800-786-9199.

Daniel M. Sullivan, Ph.D.
Primary Examiner
Art Unit 1636



DANIEL M. SULLIVAN
PATENT EXAMINER

GenCore version 5.1.7
Copyright (c) 1993 - 2006 Bioceleration Ltd.

OM nucleic - nucleic search, using sw model

Run on: February 10, 2006, 06:52:37 : Search time 45.2164 Seconds
(without alignments)
14034.494 Million cell updates/sec

Title: US-09-846-456A-2

Perfect score: 357

Sequence: 1 tggaggtctcagctgagg.....gaggaaggaagctgctg 357

Scoring table: IDENTITY_NUC

Gapop 10.0, Gapext 1.0

Searched: 1303057 seqs, 888780828 residues

Total number of hits satisfying chosen parameters: 2606114

Minimum DB seq length: 0

Maximum DB seq length: 7000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Liefting first 45 summaries

Database : Issued Patents NA:*

- 1: /cgn2_6/ptodata/1/ina/1 COMB.seq:*
- 2: /cgn2_6/ptodata/1/ina/5 COMB.seq:*
- 3: /cgn2_6/ptodata/1/ina/6 COMB.seq:*
- 4: /cgn2_6/ptodata/1/ina/8 COMB.seq:*
- 5: /cgn2_6/ptodata/1/ina/H COMB.seq:*
- 6: /cgn2_6/ptodata/1/ina/PCTUS COMB.seq:*
- 7: /cgn2_6/ptodata/1/ina/PP COMB.seq:*
- 8: /cgn2_6/ptodata/1/ina/RE COMB.seq:*
- 9: /cgn2_6/ptodata/1/ina/backfiles1.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	340.2	95.3	10545	US-09-526-193A-14	Sequence 14, Appl
2	203.8	57.1	1092	US-10-000-489-101	Sequence 101, App
3	203.4	57.0	447	US-09-621-976-13889	Sequence 13889, A
4	159.4	44.6	10442	US-09-596-141C-1	Sequence 1, Appli
5	159.4	44.6	10442	US-09-595-526C-1	Sequence 1, Appli
6	159.4	44.6	10474	US-09-596-141C-7	Sequence 7, Appli
7	159.4	44.6	10474	US-09-596-141C-9	Sequence 9, Appli
8	159.4	44.6	10474	US-09-595-526C-7	Sequence 7, Appli
9	159.4	44.6	10474	US-09-595-526C-9	Sequence 9, Appli
10	135.8	38.0	7860	US-09-526-193A-2	Sequence 2, Appli
11	37.8	10.6	8920	US-09-949-016-15445	Sequence 15145, A
12	37.8	10.6	30678	US-09-949-016-1618	Sequence 12818, A
13	36.4	10.2	154600	US-09-949-016-14757	Sequence 14757, A
14	35.8	10.0	858	US-09-540-236-1287	Sequence 1287, Ap
15	35.8	10.0	92407	US-09-596-007-36	Sequence 36, Appl
16	35.8	10.0	234884	US-09-949-016-16420	Sequence 16420, A
17	35.7	9.9	601	US-09-949-016-21645	Sequence 21645, A
18	35.2	9.9	601	US-09-949-016-156690	Sequence 156690, A
19	35.2	9.9	231129	US-09-949-016-16110	Sequence 16110, A
20	35.2	9.9	266293	US-09-949-016-11934	Sequence 11934, A
21	35	9.8	298	US-09-543-999C-10257	Sequence 10257, A
22	34.4	9.6	6588	US-09-949-016-1076	Sequence 1076, Ap
23	33.4	9.4	4438	US-09-949-016-13578	Sequence 13578, A
24	32.8	9.2	137753	US-09-949-016-17404	Sequence 17404, A

C	25	32.6	9.1	601	US-09-949-016-94873	Sequence 94873, A
	26	32.6	9.1	601	US-09-949-016-112405	Sequence 112405, A
	27	32.6	9.1	601	US-09-949-016-112408	Sequence 112408, A
	28	32.6	9.1	17321	US-09-949-016-14593	Sequence 14503, A
	29	32.6	9.1	24440	US-09-949-016-12418	Sequence 12118, A
	30	32.6	9.1	86380	US-09-949-016-14837	Sequence 14827, A
	31	32.2	9.0	22896	US-09-949-016-17127	Sequence 17127, A
C	32	31.8	8.9	700	US-09-735-271-884	Sequence 884, App
	33	31.8	8.9	2400	US-10-104-047-703	Sequence 703, App
	34	31.4	8.8	601	US-09-949-016-22830	Sequence 22830, A
	35	31.4	8.8	601	US-09-949-016-155754	Sequence 155754, A
	36	31.4	8.8	29960	US-09-949-016-11578	Sequence 11978, A
	37	31.4	8.8	30054	US-09-949-016-16100	Sequence 16100, A
	38	31.2	8.7	37710	US-09-949-016-15761	Sequence 15761, A
	39	31.2	8.7	37712	US-09-949-016-12692	Sequence 12692, A
	40	31.2	8.7	283538	US-09-949-016-13506	Sequence 13506, A
	41	31	8.7	10968	US-08-680-327-2	Sequence 2, Appli
	42	31	8.7	10968	US-09-228-246-1	Sequence 1, Appli
C	43	30.8	8.6	1037	US-08-462-195-3	Sequence 3, Appli
C	44	30.8	8.6	1037	US-08-636-883-3	Sequence 3, Appli
C	45	30.8	8.6	1047	US-09-127-829-3	Sequence 3, Appli

ALIGNMENTS

RESULT 1
US-09-526-193A-14
Sequence 14, Application US/09526193A
Patent No. 6617122
GENERAL INFORMATION:
APPLICANT: Hayden, Michael R.
APPLICANT: Brooks-Wilson, Angela R.
APPLICANT: Pimstone, Simon N.
TITLE OF INVENTION: METHODS AND REAGENTS FOR MODULATING
TITLE OF INVENTION: CHOLESTEROL LEVELS
FILE REFERENCE: 50110/002005
CURRENT APPLICATION NUMBER: US/09526,193A
CURRENT FILING DATE: 2000-03-15
PRIOR APPLICATION NUMBER: 60/124,702
PRIOR FILING DATE: 1999-03-15
PRIOR APPLICATION NUMBER: 60/138,048
PRIOR FILING DATE: 1999-06-08
PRIOR APPLICATION NUMBER: 60/139,600
PRIOR FILING DATE: 1999-06-17
PRIOR APPLICATION NUMBER: 60/151,977
PRIOR FILING DATE: 1999-09-01
NUMBER OF SEQ ID NOS: 287
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 14
TYPE: DNA
LENGTH: 10545
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: misc_feature
LOCATION: (1)...(10545)
OTHER INFORMATION: n = a, t, c, or g
US-09-526-193A-14

Query Match:	95.3%	Score 340.2;	DB 3;	Length 10545;
Best Local Similarity	98.9%	Pred. No. 2.5e-98;		
Matches 353;	Conservative 0;	Mismatches 3;	Indels 1;	Gaps 1;
QY	1	TGGAGGTCTCAGCTCAGAGGGCTGGATTAGCAGTCTCTCATTTGTTGTTGCGTTCGAGCA	60	
DB	8043	TGGAGGTCTCAGCTCAGAGGGCTGGATTAGCAGTCTCTCATTTGTTGTTGCGTTCGAGCA	8102	
QY	61	ATAACTGATGCTGTTTCCCTCCCTGCTTTATCTTTTCAGTTAATGACACGCCACCGGCGT	120	
DB	8103	ATAACTGATGCTGTTTCCCTCCCTGCTTTATCTTTTCAGTTAATGACACGCCACCGGCGT	8161	
QY	121	CCCTGCTCAGCTCTGGCCGCTGCTCCAGGGCTCCGAGCCACACGCTGGGCTGCT	180	

	Query Match	57.1%	Score 203.8	DB 3	Length 1062
	Best Local Similarity	84.8%	Prod. No. 46-55		
	Matches 240	Conservative	0	Mismatches 42	Indels 1
					Gaps 1
Qy	39	ATTGGTGATGCGCTTTGCAGCAATAACCTGATGCGTGTTCCTCCCTCTGCTTATCTTTCA	98		
Db	1	ATTGGTGATGCGCTTTGCAGCAATAACCTGATGCGTGTTCCTCCCTCTGCTTATCTTTCA	60		
Qy	99	GTTAATGACCAACCCACCGGCGCTCCCTGCTGTGAGCTTGGCGCGTCCCTTCAGGGCTCC	158		
Db	61	GTTAATGACCAACCCACCGGCGCTCCCTGCTGTGAGCTTGGCGCGTCCCTTCAGGGCTCC	119		
Qy	159	CGAGCCACACGCTGGGCGTGTGGCTGAGGGAAATGCGATGTTGGCTTCAGCTAGGTT	218		
Db	120	CGAGCCACACGCTGGGCGTGTGGCTGAGGGAAATGCGATGTTGGCTTCAGCTAGGTT	179		

RESULT 4
US-09-596-141C-1
; Sequence 1, Application US/09596141C
; Patent No. 6821774
; GENERAL INFORMATION:
; APPLICANT: Lawn, Richard M.
; APPLICANT: Wade, David
; APPLICANT: Oram, John F.
; APPLICANT: Garvin, Michael
; TITLE OF INVENTION: Compositions and
; TITLE OF INVENTION: Biflux and Rail
; TITLE OF INVENTION: Transporter Protein
; FILE REFERENCE: 99,395-B
; CURRENT APPLICATION NUMBER: US/09/5-
; CURRENT FILING DATE: 2000-06-16
; PRIOR APPLICATION NUMBER: US 60/140
; PRIOR FILING DATE: 1999-06-18
; PRIOR APPLICATION NUMBER: US 60/153
; PRIOR FILING DATE: 1999-09-14

1585 TTCTGCCCAAACTCAGGTCAAACTGTGAAAGTCTCAAAATGTGAATCTGCGCTTCAAGT 1644
Db
252 TTCTGCCCAAACTCAGGTCAAACTGTGAAAGTCTCAAAATGTGAATCTGCGCTTCAAGT 311
Qy
1645 GGTCTACAAAGGATCTTTTCAAGGTAGAGACCTTGTGGCCCTCCACAGTGCATCTCCAGG 1704
Db
312 GGTCTACAAAGGATCTTTTCAAGGTAGAGACCTTGTGGCCCTCCACAGTGCATCTCCAGG 371
Qy
1705 GCTGTCTTGGCCCTCTTCTCAACGGGCTGTCTCCTGAGTCTTCTATGAAT---CCTTCAGGGC 1761
Db
372 GCTGTCTTGGCCCTCTTCTCAACGGGCTGTCTCCTGAGTCTTCTATGAATCTCCTTCAGGGC 430
Qy
1762 AGATTCTATTTAGATCTTCAACAGTTGACCTGTGTTTGGCCAGAAAGGTGCATTT 1821
Db
431 AGATTCTATTTAGATCTTCAACAGTTGACCTGTGTTTGGCCAGAAAGGTGCATTT 490
Qy
1822 TAGTTTGTGGCTGTGATGATGACTTAAATATTTAGAC-ATGGTGTGAGGCTGCATTT 1879
Db
491 TAGTTTGTGGCTGTGATGATGACTTAAATATTTAGACATATGTTGTAGGCTGCATTT 550
Qy
1880 CCTACTCTTGGCTTTTGTGGCCCTCCAGTGTGTTTGGGTAGTTTGTCT-CCCTTACAG 1938
Db
551 CCTACTCTTGGCTTTTGTGGCCCTCCAGTGTGTTTGGGTAGTTTGTCTCCTCCCTACAG 610
Qy
1939 CCAAGGCAAAACAGAGAGTTGAGGTCTGGAGTGTGCTACATATTTTACACAGCTGCAA 1998
Db
611 CCAAGGCAAAACAGAGAGTTGAGGTCTGGAGTGTGCTACATATTTTACACAGCTGCAA 670
Qy
1999 ATCTCTGGCTGCACTCACAAAGTATACAAATTAATAACAGTCTCTGTGTTTATCAC 2058
Db
671 ATCTCTGGCTGCACTCACAAAGTATACAAATTAATAACAGTCTCTGTGTTTATCAC 730
Qy
2059 AGGAGGCTGATCAATATATAAATAAAGGGGCTGTG-CCATATTTCTTGTGTTT 2117
Db
731 AGGAGGCTGATCAATATATAAATAAAGGGGCTGTGCTCCCATATTTCTGTGTTT 790
Qy
2118 TTGTTTGTGTTTGTGTTTCTTTTGTGTTTGTGTTTGTGTTTGTGTTTGTGTTTGTGTTT 2177
Db
791 TTG-----TTGTTTGTGTTTCTTTTGTGTTTGTGTTTGTGTTTGTGTTTGTGTTT 841
Qy
2178 TGAAGCAACAGTAAGATGTTCTCTCGGTCTCTCTGACCACTCGGGAGCTCAGGCT 2237
Db
842 TGAAGCAACAGTAAGATGTTCTCTCGGTCTCTCTGACCACTCGGGAGCTCAGGCT 901
Qy
2238 GGAATCTTCAAGCAGTAGTCTGCTTCAAAATCAAAAGTCCAGTCTGTGGGGGAA 2297
Db
902 GGAATCTTCAAGCAGTAGTCTGCTTCAAAATCAAAAGTCCAGTCTGTGGGGGAA 961
Qy
2298 ACAAAAGCAGCCATTTACCAAGGACTGTCTCGCTTCTGCTACCCAGCCTAGGCT 2357
Db
962 ACAAAAGCAGCCATTTACCAAGGACTGTCTCGCTTCTGCTACCCAGCCTAGGCT 1021
Qy
2358 TTCAAGGCAACAAAGACAGCAAAATGATTTGGCTCTGAGGAGATTCAGCCTAGA 2417
Db
1022 TTCAAGGCAACAAAGACAGCAAAATGATTTGGCTCTGAGGAGATTCAGCCTAGA 1081
Qy
2418 GCTCTCTCTCCCCCAATCTCTCTGCTGAGGAACTTAAACAAAGGAAAAAATTTG 2477
Db
1082 GCTCTCTCTCCCCCAATCTCTCTGCTGAGGAACTTAAACAAAGGAAAAAATTTG 1141
Qy
2478 CGAAAGCAGATTTAGAGAGCAAAATTTCACTGTGCTCTGCTGCTGCGGAGACCTGG 2537
Db
1142 CGAAAGCAGATTTAGAGAGCAAAATTTCACTGTGCTCTGCTGCTGCGGAGACCTGG 1201
Qy
2538 ACTAGAGTCTGCGGCGAGCCCGGAGCCAGGCTTCCCGCGCTTTAGGCGGCGG 2597
Db
1202 ACTAGAGTCTGCGGCGAGCCCGGAGCCAGGCTTCCCGCGCTTTAGGCGGCGG 1261
Qy
2598 GCGCGGCGAGCGGAGCGGAGCCCGGAGCCCGGAGCCCGGAGCCCGGAGCCCGGAG 2657
Db
1262 GCGCGGCGAGCGGAGCGGAGCCCGGAGCCCGGAGCCCGGAGCCCGGAGCCCGGAG 1321
Qy
2658 CCCCACCCCAACCCCAACCCCAACCTCCCCCAACTCCTCTAGATGTGTGTGGGGGCTGAACG 2717

1322 -----CCCCACCCACCCACCTTCCCTCAGTCTCCTAGATGTGTCTGGGGGCTGAACG 1376
Qy
2718 TCGCCCGTTTAAAGGGCGGGGCGCGGCTTCAAGTCTTCTGCTGAGTGAATGAATACA 2777
Db
1377 TCGCCCGTTTAAAGGGCGGGGCGCGGCTTCAAGTCTTCTGCTGAGTGAATGAATACA 1436
Qy
2778 TAAACAGAGGCGGGAGGGGGCGGGAGGGAGGAGACAGGCTTTTGAACCTTGAATAA 2837
Db
1437 TAAACAGAGGCGGGAGGGGGCGGGAGGGAGGAGACAGGCTTTTGAACCTTGAATAA 1496
Qy
2838 CQCTGCGCTCGGTGACGCGAATCTATAAAGGAACTAGTCCCGGCAAAATCCCGTAA 2897
Db
1497 CQCTGCGCTCGGTGACGCGAATCTATAAAGGAACTAGTCCCGGCAAAATCCCGTAA 1556
Qy
2898 TTGCGAGCGAGTGTAGTGGGGCGGGAGCCCGCAGAGCGGAGCCGCTTCTTCCCGG 2957
Db
1557 TTGCGAGCGAGTGTAGTGGGGCGGGAGCCCGCAGAGCGGAGCCGCTTCTTCCCGG 1616
Qy
2958 GCTGCGGAGGGCAGCGCGGGAGCTC 2984
Db
1617 GCTGCGGAGGGCAGGGCGGGAGCTC 1643

RESULT 3
US-09-560-372-1
; Sequence 1, Application US/09560372
; Patent No. 6773893
; GENERAL INFORMATION:
; APPLICANT: Tell, Alan R.
; TITLE OF INVENTION: HUMAN ABC1 PROMOTER AND ASSAY BASED THEREON
; FILE REFERENCE: 61766.app
; CURRENT APPLICATION NUMBER: US/09/560,372
; CURRENT FILING DATE: 2001-07-20
; NUMBER OF SEQ ID NOS: 17
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 1
; LENGTH: 1197
; TYPE: DNA
; ORGANISM: human
US-09-560-372-1

Query Match: 35.1%; Score 1134.8; DB 3; Length 1197;
Best Local Similarity 98.4%; Pred. No. 7.9e-271; Indels 17; Gaps 4;
Matches 1193; Conservative 0; Mismatches 2; Indels 17; Gaps 4;
Qy 1791 ACCTGAGTTTGGCCAGAAATAGGTGACATTTAGTTTGTGGCTTGAATGAGTAA 1850
Db 1 ACCTGAGTTTGGCCAGAAATAGGTGACATTTAGTTTGTGGCTTGAATGAGTAA 60
Qy 1851 TATTTAGAC--ATGGTGTAGGCTGCAATCTCTTGTGCTTTTGTGCTTCCCTCC 1908
Db 61 TATTTAGACATATGTTGTAGGCTGCAATCTCTTGTGCTTTTGTGCTTCCCTCC 120
Qy 1909 AGTGTTTGGTGTGTTTGTCTCCCTACAGCCAAAGGCAACAGAGAGTGTGGAGTCTG 1968
Db 121 AGTGTTTGGTGTGTTTGTCTCCCTACAGCCAAAGGCAACAGAGAGTGTGGAGTCTG 180
Qy 1969 GAGTGGCTACATAATTTTACAGACTGCAATTTCTGCTGCTGCAATTTCAAAATATATA 2028
Db 181 GAGTGGCTACATAATTTTACAGACTGCAATTTCTGCTGCTGCAATTTCAAAATATATA 240
Qy 2029 AACTAAATCAAGTCTGTGTTTATACAGGAGGCTGATCAATATATGAATATAA 2088
Db 241 AACTAAATCAAGTCTGTGTTTATACAGGAGGCTGATCAATATATGAATATAA 300
Qy 2089 AGGGGCTGGTCCATATTTGTGTTTGTGTTTGTGTTTGTGTTTGTGTTTGTGTTT 2148
Db 301 AGGGGCTGGTCCATATTTGTGTTTGTGTTTGTGTTTGTGTTTGTGTTTGTGTTT 351
Qy 2149 GTTTTGTGGCTCTCTCTCTCTCAATTTATGAAGAGACAGTGAATGTTCTCTCGGG 2208
Db 352 GTTTTGTGGCTCTCTCTCTCTCAATTTATGAAGAGACAGTGAATGTTCTCTCGGG 411

2209 TCCTCTGAGGAGCTGGGAGCTCAGGCTGGGATCTCCAGGAGTAGTGGCTATCA 2268
412 TCCTCTGAGGAGCTGGGAGCTCAGGCTGGGATCTCCAGGAGTAGTGGCTATCA 471
2269 AAAATCAAGTCCAGGTTTGTGGGGGAAACAAAGACAGCCCATTAACCCAGAGGAGTGT 2328
472 AAAATCAAGTCCAGGTTTGTGGGGGAAACAAAGACAGCCCATTAACCCAGAGGAGTGT 531
2329 CCGCTTCCCTCACCAGCCTAGGCTTTGAAGGAAACAAAGACAGCAAAATGA 2388
532 CCGCTTCCCTCACCAGCCTAGGCTTTGAAGGAAACAAAGACAGCAAAATGA 591
2389 TTGGCGCTCTGAGGAGATTCAGCTAGAGTCTCTCTCCCAATCCCTCCCTCCGGCT 2448
592 TTGGCGCTCTGAGGAGATTCAGCTAGAGTCTCTCTCCCAATCCCTCCCTCCGGCT 650
2449 GAGGAACTAACAAAGGAAAGAAATTTGCGGAAAGCAGGATTTAGAGGAGCAAAATTC 2508
651 GAGGAACTAACAAAGGAAAGAAATTTGCGGAAAGCAGGATTTAGAGGAGCAAAATTC 710
2509 ACTGGTGGCTTGGCTGCGGGAACGTGGAAGTCTGAGGAGTCTGGGCGAGCCCGAGCC 2568
711 ACTGGTGGCTTGGCTGCGGGAACGTGGAAGTCTGAGGAGTCTGGGCGAGCCCGAGCC 770
2569 AGCGCTTCCCGCGCTCTTAGGCGCGGCGCGCGGCGGGAAGGAGCGCAGAGCCGG 2628
771 AGCGCTTCCCGCGCTCTTAGGCGCGGCGCGCGGCGGGAAGGAGCGCAGAGCCGG 830
2629 GACCTTAAGACACTGTGTACCTTCCACCCCAACCCCAACCCCAACCCCAAC 2688
831 GACCTTAAGACACTGTGTACCTTCCACCCCAACCCCAACCCCAACCCCAAC 885
2689 TCCTAGAGTGTGCGGGGCTGACGTCGCGCGCTTTAAGGGGCGGCGCGGCTCCA 2748
886 TCCTAGAGTGTGCGGGGCTGACGTCGCGCGCTTTAAGGGGCGGCGCGGCTCCA 945
2749 CGTGTCTTCTGTGAGTGAATCAATAAAGAGAGCGGCGGGAAGGGGCGGAGGA 2808
946 CGTGTCTTCTGTGAGTGAATCAATAAAGAGAGCGGCGGGAAGGGGCGGAGGA 1005
2809 GGAGAGCAGAGCTTTGACCGATGAACTCTGGCTGGTGGTGGAGCCGGAATCTATAA 2868
1006 GGAGAGCAGAGCTTTGACCGATGAACTCTGGCTGGTGGTGGAGCCGGAATCTATAA 1065
2869 AGGAAGTCTCCCGGCAAAACCCCGTAATTCGAGGAGAGTGGGGCGGAGCC 2928
1066 AGGAAGTCTCCCGGCAAAACCCCGTAATTCGAGGAGAGTGGGGCGGAGCC 1125
2929 GCAGAGCCGAGCGACCTTCTCTCCCGGCTGCGGAGGAGCGGCGGAGCTCCGG 2988
1126 GCAGAGCCGAGCGACCTTCTCTCCCGGCTGCGGAGGAGCGGCGGAGCTCCGG 1185
2989 CACCAACAGAGC 3000
1186 CACCAACAGAGC 1197

RESULT 4

US-09-949-016-17196
Sequence 17196, Application 10/09/949016
Patent No. 6812339
GENERAL INFORMATION:
APPLICANT: VENTER, J. Craig et al.
TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
FIVE REFERENCE: CL001307
CURRENT APPLICATION NUMBER: US/09/949,016
CURRENT FILING DATE: 2000-04-14
PRIOR APPLICATION NUMBER: 60/244,755
PRIOR FILING DATE: 2000/10-20
PRIOR APPLICATION NUMBER: 60/237,768
PRIOR FILING DATE: 2000-10-03

PRIOR APPLICATION NUMBER: 60/231,498
PRIOR FILING DATE: 2000-09-08
NUMBER OF SEQ ID NOS: 207012
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 17196
LENGTH: 118143
TYPE: DNA
ORGANISM: Human
US-09-949-016-17196

Query Match 10.8%; Score 347.4; DB 3; Length 118143;
Best Local Similarity 65.3%; Pred. No. 5.4e-75;
Matches 596; Conservative 0; Mismatches 296; Indels 21; Gaps 5;

362 AGATGAAGAAACAGCGCGGCAATGGCTAATGCTTAATCCAGCACTTTGGAGGC 421
80047 AAAATATGTCATAGCTGGGCAATGGTGGTTCATGCTGTAATCCAGCACTTTGGAGGC 80106
422 TGAGGCCAGAGGATCGTTGAGCTCCAGAGTTTGAGCCAGGCTGGATAACATGGCAAA 481
80107 CAGCGCGGCGAGTTGCTTGAGCCAGGAGTTGAGAGCCAGGCTGAGCAATGTGGTGA 80166
482 CCCTCTCTCAAAAAAATAAATAATAGATCGGTGTGGTCATGACCTGTGGTC 541
80167 CCCTCTCTCTAC - TAAAAATATGAAATTAGCCAGGAGTGGTGTGCGCTATGTC 80224
542 CCAGCTACTTGGAGGCTAAGTGGAGCTTCGCTTGAGCCAGGAGTCAAGTCTACAC 601
80225 CAGCTACTTGGAGGCTAAGTGGAGGATCATTGAGCCCTGGAGTTCAAGGCTGCA 80284
602 TGAGCCATGATTCATCTGACCTCCAGCTGGGTGAGAGAGCAAGACCTGTCTCAA 661
80285 TGAGCCATGATTCGCGCTACTGACCTCCAGCTGGGTGAGAG - ACAGAAACAGACCTGTCTCAA 80343
662 AAAGAGAAATGAAGAGAAAGAAAGAGAGAGAGAGAGAGATGAGGGAGAGGG 721
80344 AACAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAA 80403
722 AGGGGGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 781
80404 AACATAGATCAAGGCTTTTAAATGGGTAGTAGTG - AAATGTACTTGTATCTG 80458
782 ATGAAACAGAGCGCAGAAAGCTTTACGTAAATTTGCTCATGTGTTGTCAAGTTTAC 841
80459 GAGTCAATATATCTGGAATGCTGGATGCTGGAATGCTGGAATGCTGGAATGCTG 80518
842 CCAAAACCCATTTATTGACCAAGTTATTCTTTGACTGAGAGAGAGAGAGAGAGAGAG 901
80519 CATGTTAGATTACAGAAACAAATGAGATAATTTAT - ATGTTAAACCTTAGTTGAC 80573
902 CTGGGCTTTGGGCTTTAGAAAGCTCATCTCTGGGCTTTCTGAGATCATCTCCCTTTCTTT 961
80574 TGGTACCACCAAAACATAGTCCCTAGTGGGTGCTGCAATGATTTGATTTTATTTTGT 80633
962 TATTTTCTGACACGAGTCTTGTCTGCTCACTCAGGCTGGAGTGCAGTGCATGATCT 1021
80634 TGTGTTTTGAGATGAGGCTTGTCTGTTGCTGAGGCTGAGTGCAGTGCAGTGCAGT 80693
1022 CGACTCACTAACTCTGCTCCGGGTTGAGGATTTCTCTCCCTCCCTCCCTCCCTCCCT 1076
80694 CGGCTCACTCAACCTCTGCTCCCTGCTCAAGGATTTCTCTGCTCAGCTCCCAAG 80753
1077 ---CTGAGATTAACAGGCG 1133
80754 TAGCTGGGATTTACAGGAAACACACCAACCGCGCGCGCGCGCGCGCGCGCGCGCGCG 80813
1134 CTGGGTTTCACTCATGCTGGCGAGGTTGCTTTCGAATCTCTGACCTGAGTGCAGTGCAG 1193
80814 CGGGGTTTCACTCATGCTGGCGAGGCTTGTCTGCTGAGTCTGAGTCTGAGTCTGAGT 80873
1194 CTTGGCTCCCAAGTCTGGGATTAAGGATGAGGATGAGGATGAGGATGAGGATGAGGAT 1253
80874 CTTAGGCTCCCAAGTCTGGGATTAAGGATGAGGATGAGGATGAGGATGAGGATGAGGAT 80913

Db 1437 TAAACAGAGGCCGCGGAAACGGGCGAGGAGGAGAGACACAGGCTTTGACCGCATAGTAA-1496
Qy 2838 CCTCTGCGCTCGGTGACGCGCAATCTATAAAGGAACTAGTCCGCGCAAAACCCG 2893
Db 1497 CCTCTGCGCTCGGTGACGCGCAATCTATAAAGGAACTAGTCCGCGCAAAACCCG 1552

RESULT 3
US-09-560-372-1
; Sequence 1, Application US/09560372
; Patent No. 6773893
; GENERAL INFORMATION:
; APPLICANT: Tall, Allan R.
; TITLE OF INVENTION: HUMAN ABC1 PROMOTER AND ASSAY BASED THEREON
; FILE REFERENCE: 61766.app
; CURRENT APPLICATION NUMBER: US/09/560,372
; CURRENT FILING DATE: 2001-07-23 4/128/2000
; NUMBER OF SEQ ID NOS: 17
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 1
; LENGTH: 1197.
; TYPE: DNA
; ORGANISM: human
US-09-560-372-1

Query Match 35.5%; Score 1027.8; DB 3; Length 1197;
Best Local Similarity 98.3%; Pred. No. 6.3e-241;
Matches 1086; Conservative 0; Mismatches 58; Gaps 4;
1791 ACTGAGTTTTGGCCAGATTAAGGTGACATTTAGTTTGTGTGGCTGATCATGACTATAA 1850
1 ACTCTAGTTTTGGCCAGATTAAGGTGACATTTAGTTTGTGTGGCTGATCATGACTATAA 60
1851 TATTTAGAC--ATGGTGTGTAGCCCTGCAATCTTACTCTGTGCTTTTTTTTGGCCCTCC 1908
61 TATTTAGACATATGGTGTGTAGCCCTGCAATCTTACTCTGTGCTTTTTTTTGGCCCTCC 120
1909 AGTGTTTTTGGGTAGTTTGTCTCCCTACAGCCAAAGGCAAAACAGAGATTTTCGAGGTCTG 1968
121 AGTGTTTTTGGGTAGTTTGTCTCCCTACAGCCAAAGGCAAAACAGATTAATTCGAGGTCTG 180
1969 GAGTGCTACATAATTTTTHACAGCTGCAATTTCTGCTGTCACATTCACAAATGTATACA 2028
181 GAGTGCTACATAATTTTACAGCACTGCAATTTCTGCTGTCACATTCACAAATGTATACA 240
2029 AACTAATAACAAGTCTCTGTGTTTTTATCACGGGAGGCTGATCAATATAATGAATATAA 2088
241 AACTAATAACAAGTCTCTGTGTTTTTATCACGGGAGGCTGATCAATATAATGAATATAA 300
2089 AGGGGCTGTGTCATATATGTTCTGTGTTTTTGTGTTTTGTTGTTGTTGTTGTTTCTTTTTT 2148
301 AGGGGCTGTGTCATATATGTTCTGTGTTTTG-----TTGTTGTTGTTCTTTTTTT 351
2149 GTTTTTGTGGCTCTCTTCTCTCAATTTATGAAGAAGCAAGTAAAGATGTTCTCTCGG 2208
352 GTTTTTGTGGCTCTCTTCTCTCAATTTATGAAGAAGCAAGTAAAGATGTTCTCTCGG 411
2209 TCCTCTGAGGAGACCTGGGGAGCTCAGGCTGGGATCTTCAAGGAGGTAGGTGCGCTATCA 2268
412 TCCTCTGAGGAGACCTGGGGAGCTCAGGCTGGGATCTTCAAGGAGGTAGGTGCGCTATCA 471
2269 AAAATCAAAGTCCAGGTTTGTGGGGGAAACAAAGCAGCCCAATACCCAGAGGACTGT 2328
472 AAAATCAAAGTCCAGGTTTGTGGGGGAAACAAAGCAGCCCAATACCCAGAGGACTGT 531
2329 CGGCTTCCCTCTACCCGAGCTTAGGCTTTGAAAGAAACAAAGCAAGCAAAATGA 2388
532 CGGCTTCCCTCTACCCGAGCTTAGGCTTTGAAAGAAACAAAGCAAGCAAAATGA 591
2389 TTGGCTCTCAGGAGATTCAGCCTAGAGCTCTCTCTCCCGCAATCCCTCCCTCGGCT 2448
592 TTGGCTCTCAGGAGATTCAGCCTAGAGCTCTCTCTCCCGCAATCCCTCCCTCGGCT 650

80167	CCCTGTCCTAC--TAAATAATGAATAATTAGCACGAGTGCGGTGTGGCCCTATGGTC	80224
542	CCAGCTACTTTGGGAGGCTAAGGTGGGAGGATCGCTTAGCCCCAGGGAGTCAAGTCTACAC	601
80226	CCAGCTACTTTGAGAGGTTGAGGTGAGAGGATCACTTTGAGCCTGGGAGTTCAAGCGCTGCAG	80284
502	TGAGCCATGATTGGATCACTGCTCCAGCTCGGTGTAGACAGACGACGCCCTGTCTCAA	661
80285	TGAGCCCAAGGTTGGCCACCTGCACTCCAGCCTTAGGCA-ACAGAACAGAACCCTGTCTCAA	80343
662	AAAAACGAATGAAGAGAAAGAAAGAAAGAGGAGGAGAGAGATGAGGGGAGGAGGG	721
80344	AACAAATAAATAAATAATATATATATACAATAAATAATGSCATAGACAATAAAGTTAGGG	80403
722	AGGGGGGAGGAAAGGAAGAGAGGAAGGAAGAAAAGAAAGATGAAAAGAAAAAACAAG	781
80404	AACATAGATACAAGGTTTTTTTTTAATGGGTAGTAGCTG-----AAATGTACTTGTACTG	80458
782	ATGAAACAGAGGCGAGAAAGACTTTTACGTAAATTGCTCATCTGTTGTTGTCAAGTTTGAC	841
80459	GAGATCAATATACTGTGAATGCTGGAACTCTGSAATGCCAATACTTTGCAACATTTTCTC	80518
842	CCCAAAACCCAATTATATTGACCAAGGTTATCTTTGACTCAGCGCAAGGGGTCGGCTCTC	901
80519	CATGTTAGGTTAAGAAACAATAGATATATTTAT-----ATGGTAAACCTTAGTTGAC	80573
902	CTGGCCCTTGGCTTTTAGAAAGCTCATCTCTGGCCTTTCTGAGATCCATCCCCTTCTTTT	961
80574	TGGTACCACCAAAATCATAGTCCCTAGTGGGAGCTGCAATGATGATTAATTTTTTGT	80633
962	TATTTTCTTGAACGAGGCTTGTCTGTCTGTCATCTCAGGCTGGAGTGAGTGGCATGATCT	1021
80634	TGTTTGTATTGAGATGGAGCCTGTCTCTGTGTCCAGGTTGGAGTGCAGTGGCGCAATCT	80693
1022	CGACTCATGTGAACCTCTGCTCCCGGGTTCAAGCGATCTCTCTGCTCTCAGCCTC----	1076
80694	CGGCTCATGCAACCTCTGCTCTCTGGGTTCAAGGATTTCTCTGTCTCAGCCTCCCAAG	80753
1077	---CTGAGATAACAGGCGCCGCCCAACACATCTGCTTAATTTTTTGATTTTTAGTAAGA	1133
80754	TAGCTGGGATTAACAGGAACAACACCACGCCAGCTAAATTTTGTATTTTWTAGTAGAGA	80813
1134	CTGGGTTTCATGTTGGCCAGGTTGGTTTGGAACTCTGACTGAGGTGNCCTGCCCCA	1193
80814	CGGGGTTTCCACATGTTGGCCAGCTAGTCTGAACTCTCTGACTCTCAGGTTGATCCGCCCA	80873
1194	CCTTGGCTCCCAAGGTCTGGGATTAACGGCATAGGCCACTGGCCCCAGTTAGATCCCA	1253
80874	CCTCAGCTCCCAAGGTCTGGGANTACAGGCATGACCCACCGGCTCTGCGATGATGA	80933
1254	TCCCTTTCTAAGG	1266
80934	CTAATTTTAAAGG	80946

RESULT 5
US-09-949-016-13690/c
; Sequence 13690, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J Craib et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CLO01307
; CURRENT APPLICATION NUMBER: US/09/949,016
; CURRENT FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,769
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012

	Query Match	12.0%;	Score 347.4;	DB 3;	Length 118143;
	Best Local Similarity	65.3%;	Prog. No. 5.5e-74;		
	Matches 596;	Conservative 0;	Mismatches 296;	Indels 21;	Gaps 5;
QY	362	AGATGAGAAACAGGCCGCGCACAAATGGCTTAATGCCCTGTATCCCGACGACTTTGGGAGGC	421		
Db	80047	AAATAATGGCATAGGCTGGGCATGTGGTGGTTCAATGCCCTGTATATCCCGACGACTTTGGGAGGC	80108		
QY	422	TGAGGCCAGAGGATGCTTTGAGCTCCAGAGCTTTGAGACCAAGCCTGGATACATGGCAAAA	481		
Db	80107	CACGGCGGGGCAATTCGTTGAGGCCAGGAGTTCGAGACCAAGCCTGAGCAATGTGGTGAAA	80166		
QY	482	CCCTGTCTCTACAAAAAATAACAAAAATAGATGGGTGTGGTGGGATGACCTGTGGTGC	541		